

(12)

DR-1239
11 May 82

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

AD

AD A 116 924

THIS DOCUMENT IS BEST QUALITY PRACTICABLE.
THE COPY FURNISHED TO DDC CONTAINED A
SIGNIFICANT NUMBER OF PAGES WHICH DO NOT
REPRODUCE LEGIBLY.

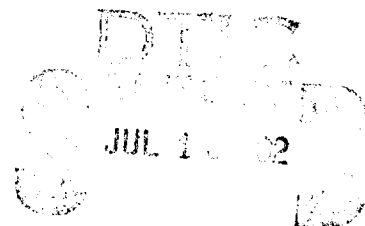
METEOROLOGICAL DATA REPORT

12823A LANCE
Missile Number 5356
Round Number 375-MCT
11 May 1982

by

DONALD C. KELLER
Program Support Coordinator
Phone Number (505) 679-9563
AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO



DMC FILE COPY

ECONI

UNITED STATES ARMY ELECTRONICS COMMAND

82 07 15 001

**Best
Available
Copy**

DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

DISCLAIMER NOTICE

**THIS DOCUMENT IS BEST QUALITY
PRACTICABLE. THE COPY FURNISHED
TO DTIC CONTAINED A SIGNIFICANT
NUMBER OF PAGES WHICH DO NOT
REPRODUCE LEGIBLY.**

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1239	2. GOVT ACCESSION NO. AD-A116924	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 12823A Lance Missile Number 5356 Round Number 375-MCT		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) White Sands Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA Task 1F665702D127-02
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002		12. REPORT DATE 11 May 1982
		13. NUMBER OF PAGES 34
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12823A LANCE, Missile Number 5356, Round Number 375-MCT are presented in tabular form.		

CONTENTS	PAGE
INTRODUCTION-----	1
DISCUSSION-----	1
GENERAL AREA MAP-----	2
TABLES	
1. Surface Observation Taken at 0615 MDT at DON-----	3
2. Don pilot-balloon Measured Wind Data at 0815 MDT-----	4
3. WSD, Holloman and Jallen Computer Met Messages-----	5
4. Jallen Significant Level Data at 0620 MDT-----	6
5. Jallen Upper Air Data at 0620 MDT-----	7
6. Jallen Mandatory Levels at 0620 MDT-----	10
7. WSD Significant Level Data at 0805 MDT-----	11
8. WSD Upper Air Data at 0805 MDT-----	12
9. WSD Mandatory Levels at 0805 MDT-----	17
10. Holloman Significant Level Data at 0715 MDT-----	18
11. Holloman Upper Air Data at 0715 MDT-----	20
12. Holloman Mandatory levels at 0715 MDT-----	25
13. Jallen Significant Level Data at 0805 MDT-----	26
14. Jallen Upper Air Data at 0805 MDT-----	27
15. Jallen Mandatory Levels at 0805 MDT-----	30

INTRODUCTION

12823A LANCE, Missile Number 5356, Round Number 375-MCT, was launched from Don, White Sands Missile Range (WSMR), New Mexico, at 0815 MDT, 11 May 1982. The scheduled launch time was 0815 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the Don Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from a RAPTS T-9 pibal observation at:

SITE AND ALTITUDE

DON 3660 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

JALLEN 0620 MDT (PRELIMINARY DATA)
WSD 0805 MDT (LAUNCE AREA DATA)
HOLLOMAN 0715 MDT (MID-COURSE DATA)
JALLEN 0805 MDT (IMPACT AREA DATA)

Accession For	
NTIS CF&I	<input checked="" type="checkbox"/>
DTIC EXP	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justified	<input type="checkbox"/>
From	<input type="checkbox"/>
DTIC	<input type="checkbox"/>
From	<input type="checkbox"/>
DTIC	<input type="checkbox"/>
A 23	



A map of California with numerous labeled locations and geographical features. Key locations include SULF, CP-70, CP-17, S-E CO, AFSW, PACI, MHP PLOT, SALINAS PEAK, JALLEN, TENVER, MAL, DEAD HORSE, EC-80, SAL, SW-50, TULA GATE, TULA PEAK, D-37/2, NORTHROP STRIP, NW-30, PONY, E28, PATSCAT, EG-37, G47, SEENOH, APKY, APACHE, MAR, DON, SMP, SHD PKT, FLOWED, LC-32, LC-33, HSD, LC-35, LC-36, LC-37, LC-39, IONOSPHERE, and C STATION. The map also shows major roads, rivers, and a compass rose indicating North. A scale bar at the bottom left indicates distances from 0 to 10 miles.

OBJECT SURFACE OBSERVATION

STATION DON SITE									
DATE 11 MAY 82		X=511,988.37		Y=247,396.36		H=3996.83			
TIME	PRECIPITATION	TEMPERATURE	DEW POINT	RELATIVE	WIND	SPEED	CHARACTER	VISIBILITY	
0815	873.1	18.3	-2.2	25	1040	CALM		35	

OBSERVATIONS TO VISIBILITY	CLOUDS				REMARKS
	1st LAYER	2nd LAYER	3rd LAYER		
	AMT TYPE HGT	AMT TYPE HGT	AMT TYPE HGT		
1 AC 10000					H ALQDS

PSYCHROMETRIC COMPUTATION

TIME	0815	
WY BULB TEMP.	18.3	
WET BULB TEMP.	8.2	
WET BULB DIFF.	10.1	
DEW POINT	-2.2	
RELATIVE HUMID.	25	

ON SITE

11 May 1982

0815 MLT

FM 988.17

AT 1021.05

1016.10

X

100			2160		
120			2160		
140			2160		
160			2160		
180			2160		
200			2160		
220			2160		
240			2160		
260			2160		
280			2160		
300			2160		
320			2160		
340			2160		
360			2160		
380			2160		
400			2160		
420	235	07	2220	230	13
440	236	07	2230	229	13
460	238	09	2340	232	16
480	235	08	2400	233	15
500	246	07	2460	233	13
520	239	08	2520	238	15
540	235	10	2580	231	15
560	203	11	2640	235	14
580	230	10	2700	231	15
600	230	10	2760	230	13
620	236	12	2820	222	13
640	227	09	2880	232	14
660	221	10	2940	225	16
680	216	11	3000	221	17
700	208	09	3060	225	15
720	208	09	3120	219	13
740	216	08	3180	218	13
760	211	11	3240	216	12
780	238	09	3300	211	14
800	211	09	3360	216	15
820	211	11	3420	209	14
840	215	12	3480	203	17
860	221	12	3540	211	14

COMPUTER MET MESSAGES
11 May 1982

WSD 0805 MDT
 METCM1324064
 111410122875
 00213003 28950875
 01260002 29000865
 02425002 28880840
 03378008 28590801
 04402018 28180754
 05406021 27740710
 06423031 27470667
 07411027 27230627
 08397027 26870589
 09384027 26490552
 10400039 26110518
 11404043 25780485
 12416050 25240438
 13420056 24430382
 14431067 23550332
 15433072 22990287
 16424079 22260247
 17427062 21660211
 18433061 21440180
 19432055 21370154
 20429065 21190131
 21432068 21060112
 22432057 21470095
 23467019 21370081
 24382015 21100069
 25312009 21440059
 26088002 21730051

HOLLOMAN 0715
 METCM1329061
 111330122871
 00196003 28270871
 01265003 28910860
 02260003 28960835
 05331003 28650797
 04417012 28220750
 05419021 27760706
 06415031 27370664
 07411025 27120623
 08375028 26830585
 09376034 26500549
 10392040 26120515
 11405046 25790482
 12415049 25270436
 13422053 24460380
 14425065 23630330
 15428062 22930285
 16418065 22300245
 17421064 21600210
 18427066 21150179
 19437052 21120153
 20425073 21170130
 21420959 21220111
 22426054 21240094
 23454025 21290080
 24420025 21100069
 25287006 21460058
 26126005 21830050

JALLEN 0805 MDT
 METCM1332065
 111410124874
 00000000 28990874
 01272008 28940864
 02329007 28780839
 03384014 28490799
 04402020 28060753
 05409028 27580708
 06411034 27290665
 07390031 27090625
 08382030 26820586
 09383031 26450550
 10390036 26060515
 11400045 25690483
 12408049 25130436
 13416058 24340380
 14423067 23480330
 15424067 22760284
 16423065 22140244
 17423072 21620209
 18423066 21440179
 19409057 21320152
 20423056 21050130
 21423055 21200110

STATION ALTIMETER
11 MAY 62
ASCELSION 1100

STATION ALTIMETER
11 MAY 62
ASCELSION 1100

STATION ALTIMETER
11 MAY 62
ASCELSION 1100

TABLE 4

STATION ALTIMETER 11 MAY 62 ASCELSION 1100	STATION ALTIMETER 11 MAY 62 ASCELSION 1100	STATION ALTIMETER 11 MAY 62 ASCELSION 1100	STATION ALTIMETER 11 MAY 62 ASCELSION 1100
075.5	0051.0	10.5	70.9
085.6	0206.0	15.0	75.0
099.0	0408.5	15.2	75.9
150.0	0600.1	19.6	77.7
190.0	0815.0	10.2	75.1
255.0	1117.0	6.5	75.1
260.0	1006.8	1.5	75.0
050.0	1458.5	-0.5	75.0
090.0	1697.0	-6.5	75.0
060.0	16752.5	-11.2	75.0
000.0	18697.5	-15.2	75.0
020.5	22703.5	-20.6	75.0
000.0	24107.1	-27.2	75.0
000.1	26500.7	-30.1	75.0
000.5	26970.5	-30.0	75.0
000.0	30700.8	-40.0	75.0
001.7	32060.9	-67.2	75.0
000.0	36000.6	-51.0	75.0
010.7	37657.5	-57.2	75.0
000.0	39527.3	-50.0	75.0
105.1	40022.0	-60.0	75.0
175.7	41097.6	-50.0	75.0
162.1	45655.0	-61.1	75.0
150.0	45990.0	-61.0	75.0
152.7	47750.7	-65.7	75.0
117.1	50120.7	-60.1	75.0

STATION ALTITUDE 4051.00 FEET MSL
 11 MAY 82 0620 MDT
 ASCELSION NO. 34

W PER AIR DATA
 1310000000
 JALLI:

GEODETIC COORDINATES
 33.10712 LAT DEG
 106.44311 LONG DEG

TABLE-5

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	WIND SPEED KNOTS	WIND DIR. DEGREES (TRUE)	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	873.3	10.3	29.0	1074.0	050.4	00	00	1.000256
4500.0	859.2	15.2	33.1	1035.0	062.3			1.000257
5000.0	843.9	19.2	35.4	1020.5	061.2			1.000254
5500.0	820.7	13.1	36.4	1000.1	059.9			1.000250
6000.0	813.0	12.0	37.4	991.0	050.0			1.000245
6500.0	799.1	10.0	38.4	977.0	057.4			1.000241
7000.0	784.7	9.7	39.6	964.5	055.9			1.000237
7500.0	770.3	0.3	41.1	951.5	054.2		23.9	1.000233
8000.0	750.3	6.0	42.6	939.0	052.0		26.9	1.000230
8500.0	742.3	5.5	41.4	920.5	050.9		30.3	1.000225
9000.0	720.5	4.1	39.4	913.7	049.3		30.3	1.000220
9500.0	713.0	2.0	37.3	901.5	047.0		33.2	1.000215
10000.0	701.0	1.5	35.3	889.0	040.0		35.9	1.000210
10500.0	689.5	0.4	33.7	875.9	044.7		38.1	1.000206
11000.0	673.5	-2.7	32.1	862.0	043.4		39.1	1.000202
11500.0	662.7	-1.0	30.6	850.0	042.0		40.2	1.000198
12000.0	650.2	-2.9	29.0	837.5	040.7		38.1	1.000194
12500.0	637.9	-4.0	27.5	824.0	039.4		35.7	1.000190
13000.0	625.7	-4.7	26.3	811.2	038.0		32.3	1.000187
13500.0	613.7	-5.2	24.9	797.5	037.9		31.2	1.000184
14000.0	601.0	-5.0	22.2	783.0	037.3		32.5	1.000181
14500.0	590.3	-5.3	20.1	770.1	036.0		33.4	1.000178
15000.0	570.9	-7.4	18.6	756.5	035.3		33.6	1.000176
15500.0	567.6	-8.5	17.2	740.0	034.0		33.1	1.000173
16000.0	550.6	-9.6	16.7	733.1	032.7		34.4	1.000170
16500.0	543.0	-10.7	14.5	723.9	031.4		30.0	1.000167
17000.0	535.1	-11.7	12.0	712.0	030.1		37.4	1.000164
17500.0	529.5	-12.0	10.6	701.5	029.0		30.2	1.000161
18000.0	514.1	-13.0	10.7	690.6	027.0		39.5	1.000157
18500.0	504.0	-14.0	9.6	679.5	026.5		41.6	1.000154
19000.0	493.8	-15.0	8.3	668.5	024.9		43.7	1.000151
19500.0	483.0	-17.1	7.2	656.0	023.5		45.5	1.000149
20000.0	474.0	-18.1	6.3	647.0	022.1		46.0	1.000146
20500.0	469.0	-19.4	5.0	637.4	020.0		47.4	1.000144
21000.0	455.0	-20.0	27.3	627.4	019.2		48.9	1.000142
21500.0	443.7	-21.0	28.3	617.0	017.7		50.1	1.000139
22000.0	430.7	-22.7	28.3	607.9	016.0		50.9	1.000137
22500.0	427.9	-24.1	28.0	596.0	015.4		51.7	1.000135
23000.0	419.0	-25.3	29.2	579.2	012.0		52.3	1.000133
23500.0	410.3	-26.0	29.0	579.2	012.0		52.4	1.000130

AA 8100 DATA INVALID DUE TO MISSING DATA AT 10000 FEET ALTITUDE

STATION ALTITUDE 9051-0 FEET MSL
11 MAY 82 0620 MDT
ASCENDING 10. 39

UPPER AIR DATA
1310030039
JALLIN

GEOMETRIC COORDINATES
27.10712 LAT DEG
107.49511 LONG DEG

TABLE-5 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TH)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	401.8	-27.6	29.9	569.0	610.0	230.0	53.5	1.000120
24500.0	393.3	-28.8	30.3	560.7	609.0	237.1	53.7	1.000120
25000.0	385.0	-30.1	30.7	551.7	607.4	237.0	53.8	1.000124
25500.0	376.8	-31.4	31.1	542.9	605.0	237.0	54.1	1.000122
26000.0	368.8	-32.7	31.5	534.2	604.2	237.0	54.6	1.000126
26500.0	361.0	-33.9	32.0	525.7	602.0	230.0	54.7	1.000118
27000.0	353.2	-35.2	32.2	517.0	601.0	230.0	54.2	1.000116
27500.0	345.5	-36.4	32.4	508.4	599.4	230.0	61.1	1.000114
28000.0	338.0	-37.6	32.6	500.0	597.9	234.0	64.5	1.000112
28500.0	330.7	-38.9	32.8	491.7	596.3	234.0	68.1	1.000110
29000.0	323.5	-40.1	30.7**	483.5	594.8	234.0	72.2	1.000108
29500.0	316.3	-41.3	21.6**	475.1	593.5	234.0	75.1	1.000106
30000.0	309.3	-42.4	12.4**	467.0	591.0	230.1	70.0	1.000104
30500.0	302.4	-43.6	3.3**	458.9	590.5	230.1	70.2	1.000102
31000.0	295.7	-44.7		450.9	588.8	237.0	74.5	1.000100
31500.0	289.0	-45.9		443.0	587.5	234.0	72.4	1.000099
32000.0	282.5	-47.1		435.3	585.8	237.0	70.8	1.000097
32500.0	276.0	-47.8		428.0	584.8	240.0	70.6	1.000095
33000.0	269.7	-48.6		418.4	583.8	240.0	70.1	1.000093
33500.0	263.6	-49.3		410.2	582.8	41.0	70.4	1.000091
34000.0	257.5	-50.1		402.1	581.9	41.0	67.4	1.000090
34500.0	251.6	-50.8		394.2	580.9	41.0	63.1	1.000088
35000.0	245.8	-51.7		386.6	579.7	41.0	66.8	1.000086
35500.0	240.0	-52.7		379.2	578.5	41.0	61.6	1.000084
36000.0	234.4	-53.6		372.0	577.2	41.0	67.1	1.000083
36500.0	228.9	-54.6		367.9	576.0	41.0	67.5	1.000081
37000.0	223.6	-55.5		358.0	574.7	41.0	67.0	1.000080
37500.0	218.4	-56.5		351.1	573.4	41.0	65.6	1.000078
38000.0	213.2	-57.4		344.3	572.2	41.0	67.7	1.000077
38500.0	208.1	-58.2		337.5	571.2	41.0	67.4	1.000075
39000.0	203.2	-58.9		330.4	570.2	41.0	67.6	1.000074
39500.0	198.3	-59.5		323.2	569.5	41.0	64.0	1.000072
40000.0	193.6	-59.7		315.9	569.2	41.0	64.6	1.000070
40500.0	188.9	-59.8		308.6	569.0	41.0	67.4	1.000069
41000.0	184.4	-59.9		301.2	568.9	41.0	64.4	1.000067
41500.0	180.0	-59.5		293.4	569.5	41.0	64.7	1.000065
42000.0	175.7	-59.0		285.6	570.0	41.0	64.0	1.000064
42500.0	171.5	-59.6		279.0	569.5	41.0	64.5	1.000062
43000.0	167.3	-60.3		272.0	568.4	41.0	64.1	1.000061
43500.0	163.3	-60.9		265.1	567.0	41.0	67.0	1.000060

** AT LEAST ONE OBSERVATION FOR EACH HOUR IN THE VALUE RANGE

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

UPPER AIR DATA
1510030039
JALLEN

TABLE-5 cont'd

STATION ALTITUDE 4051.00 FEET MSL
11 MAY 82 0620MDT
ASCLENSION NO. 59

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (IN) SPEED M/SEC	INDEX OF REFRACTION
44000.0	157.4	-61.3		262.0	567.1	232.2	1.000058
44500.0	155.5	-61.5		256.0	566.0	232.0	1.000057
45000.0	151.8	-61.7		250.0	565.5	233.2	1.000056
45500.0	148.1	-62.0		244.5	565.1	233.4	1.000054
46000.0	144.5	-62.4		238.0	565.0	237.5	1.000053
46500.0	141.0	-62.8		233.4	565.1	239.6	1.000052
47000.0	137.6	-63.1		228.2	564.0	241.5	1.000051
47500.0	134.2	-63.5		223.0	564.1	243.1	1.000050
48000.0	130.9	-63.7		217.0	563.8	244.2	1.000047
48500.0	127.7	-63.8		212.0	563.0	244.8	1.000046
49000.0	124.0	-63.9		207.5	563.5		1.000045
49500.0	121.6	-64.0		202.5	563.4		1.000045
50000.0	118.6	-64.1		197.0	563.3		1.000044

STATION ALTITUDE 4051.00 FEET MSL
 11 MAY 52 0620 MDT
 ASCENSION NO. 39

ADATORY LEVEL
 1310630059
 JALLEN

COORDINATE COORDINATES
 33.16712 LAT DEG
 100.49511 LONG DEG

TABLE-6

PRESSURE	GEOPOTENTIAL	AIR	TEMPERATURE	REL. HUM.	WIND	WIND
MILLIBARS	FEET	DEGREES	DEWPOINT	PERCENT	DIR	SPED
			CENTIGRADE		DEGREES	MILES
850.0	4797.	14.6	-7	35.	999.0	999.0XX
800.0	6467.	11.0	-2.7	35.	999.0	999.0XX
750.0	8219.	6.2	-5.5	43.	235.0	235.0
700.0	10058.	1.3	-12.4	35.	223.0	223.0
650.0	11999.	-2.9	-16.4	29.	209.0	209.0
600.0	14066.	-5.9	-19.7	52.	215.0	215.0
550.0	16280.	-10.3	-21.3	40.	209.0	209.0
500.0	18673.	-15.2	-30.7	25.	223.0	223.0
450.0	21255.	-21.2	-35.0	20.	235.0	235.0
400.0	24069.	-27.8	-39.5	30.	235.0	235.0
350.0	27166.	-35.7	-40.3	32.	230.0	230.0
300.0	30622.	-44.0			230.0	230.0
250.0	34563.	-51.0			230.0	230.0
200.0	39237.	-59.4			230.0	230.0
175.0	41977.	-59.1			230.0	230.0
150.0	45123.	-61.8			230.0	230.0
125.0	48304.	-63.9			230.0	230.0

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

GEODOLITIC COORDINATES
32.40043 LAT DEG
100.57053 LON DEG

SIGNIFICANT LEVEL DATA
1310020202
WHITE SANDS

STATION ALTITUDE 3989.00 FLLT MSL
11 MAY 80 0805 MDT
ASCENSION NO. 202

TABLE-7

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR DEGREE'S	TEMPERATURE DEWPOINT DEGREE'S	HUMIDITY PERCENT
675.3	3909.0	15.5	-2.0	30.0
660.6	4461.1	16.5	-2.0	28.0
650.0	4806.8	15.8	-2.0	25.0
646.2	5931.4	12.9	-4.2	30.0
606.4	6264.5	12.9	-4.2	30.0
700.0	10097.0	2.8	-11.0	33.0
673.8	11108.3	1.2	-17.1	24.0
669.3	11285.6	1.7	-17.7	22.0
628.8	12931.0	-0.7	-20.8	20.0
619.6	13317.2	-1.7	-21.1	21.0
500.0	18797.9	-14.1	-31.1	22.0
460.0	20821.7	-17.7	-36.2	18.0
400.0	24245.1	-26.5	-42.0	20.0
343.2	27823.0	-35.1	-49.0	21.0
323.0	29205.6	-38.4	-52.4	21.0
300.0	30804.6	-42.1		
250.0	34855.5	-50.3		
200.0	39563.3	-58.7		
187.0	40952.8	-59.2		
177.6	42020.4	-58.2		
155.6	44726.2	-60.1		
150.0	45509.3	-58.7		
114.2	51088.0	-64.0		
105.9	52623.1	-61.2		
100.0	53747.5	-61.1		
92.2	55477.5	-57.1		
80.6	58263.2	-60.6		
76.9	59233.1	-58.0		
70.0	61163.6	-62.8		
63.0	63307.2	-62.8		
62.0	63635.0	-58.9		
50.0	68129.4	-55.6		
45.9	69946.6	-51.8		
33.8	76528.6	-50.2		
30.0	79093.8	-52.0		
20.0	87010.1	-45.3		
16.7	91842.7	-46.2		

STATION ALTITUDE 3999.00 FEET MSL
11 MAY 82 0805 MDT
ASCENSION NO. 202

UPPER AIR DATA
1310020.02
WHITE SANDS

GEOMETRIC ALTITUDE
0000000.00 LAT 000
100000000.00 LONG 000

TABLE-8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY G/CM ³	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES TRUE	WIND SPEED M/SEC	TEMP. OR REFRACTIVE
3989.0	875.5	15.5	50.0	1054.0	662.0	120.0	2.0	1.000259
4000.0	875.0	15.5	50.0	1053.5	662.7	120.5	2.0	1.000259
4500.0	859.4	16.4	28.0	1031.5	663.7	152.0	2.3	1.000253
5000.0	844.1	15.3	28.3	1017.2	662.4	180.5	2.7	1.000249
5500.0	829.0	14.0	29.2	1003.5	660.9	207.7	3.7	1.000245
6000.0	814.2	12.9	30.0	989.5	659.0	216.0	3.4	1.000241
6500.0	799.4	12.3	30.2	975.7	658.0	210.7	3.7	1.000237
7000.0	784.8	11.0	30.6	960.4	657.5	210.2	11.0	1.000233
7500.0	770.4	9.6	31.0	947.4	655.7	222.0	13.4	1.000219
8000.0	750.4	8.3	31.4	934.5	654.2	224.0	13.5	1.000225
8500.0	742.5	7.0	31.7	921.6	652.0	224.0	13.2	1.000221
9000.0	720.0	5.7	32.1	909.5	651.0	225.0	19.9	1.000217
9500.0	715.6	4.4	32.5	897.0	649.5	227.1	21.0	1.000215
10000.0	702.5	3.1	32.9	884.9	647.9	230.1	24.0	1.000210
10500.0	689.4	2.2	29.4	871.4	646.0	235.0	27.2	1.000205
11000.0	676.6	1.4	25.0	857.7	645.0	239.0	29.1	1.000200
11500.0	663.3	1.4	21.7	841.7	645.0	237.3	30.0	1.000195
12000.0	651.4	1.7	21.1	826.1	644.4	237.0	30.3	1.000191
12500.0	639.2	-1.1	20.5	814.0	644.0	235.0	26.0	1.000188
13000.0	627.1	-0.9	20.2	801.9	643.1	230.5	27.5	1.000185
13500.0	615.2	-2.1	21.0	790.2	641.6	227.7	26.2	1.000182
14000.0	603.3	-3.2	21.1	776.1	640.2	227.2	26.7	1.000179
14500.0	591.6	-4.4	21.2	760.3	638.9	224.5	26.7	1.000176
15000.0	580.1	-5.5	21.3	754.7	637.5	220.9	26.6	1.000173
15500.0	568.9	-6.6	21.4	743.2	636.2	215.0	26.8	1.000170
16000.0	557.9	-7.8	21.5	731.9	634.8	215.0	27.2	1.000167
16500.0	547.3	-8.9	21.6	720.0	633.4	217.0	27.2	1.000164
17000.0	536.4	-10.0	21.7	709.9	632.1	215.1	27.0	1.000162
17500.0	526.1	-11.2	21.8	699.2	630.7	215.1	26.4	1.000159
18000.0	515.9	-12.3	21.9	688.0	629.3	215.0	26.2	1.000156
18500.0	505.9	-13.4	21.9	676.5	627.9	215.0	26.0	1.000154
19000.0	495.9	-14.5	21.6	667.0	626.7	215.0	26.1	1.000151
19500.0	486.0	-15.3	20.6	656.0	625.0	215.0	26.0	1.000148
20000.0	476.5	-16.2	19.6	645.7	623.5	215.0	26.0	1.000146
20500.0	466.6	-17.1	18.6	635.0	623.4	215.0	26.0	1.000143
21000.0	457.4	-18.2	18.1	624.0	623.2	215.0	26.0	1.000141
21500.0	448.1	-19.4	18.4	613.1	623.0	215.0	26.0	1.000139
22000.0	438.9	-20.7	18.7	603.0	622.0	215.0	26.0	1.000136
22500.0	429.9	-22.0	19.0	590.5	621.1	215.0	26.0	1.000134
23000.0	421.1	-23.3	19.3	587.1	620.0	215.0	26.0	1.000132

02.00043 LAT DEG
106.57033 LON DEG

UPPER AIR DATA
131000Z JUL 62
WHITE SANDS

STATION ALITUDE 5989.00 F&T MSL
11 MAY 82 0805 MDT
ASCEHSLUIN NO. 202

TABLE-8 cont'd

GEOMETRIC LATITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM./CUBIC METER	DEPTH OF SOUND METERS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	WET-POINT CENTIGRADE				DIRECTION DEGREES (T)	SPEED KNOTS	
23500.0	412.5	-24.6	-41.2	19.6	570.1	614.3	234.7	50.2	1.000130
24000.0	404.1	-25.9	-42.1	19.9	569.2	612.7	235.2	51.1	1.000128
24500.0	395.7	-27.1	-43.1	20.1	560.1	611.1	235.7	52.6	1.000126
25000.0	387.3	-28.3	-44.1	20.2	551.0	609.6	236.3	54.5	1.000123
25500.0	379.1	-29.5	-45.0	20.4	542.0	608.1	236.5	57.3	1.000121
26000.0	371.1	-30.7	-46.0	20.5	533.1	606.6	236.9	60.0	1.000119
26500.0	363.2	-31.9	-47.0	20.6	524.5	605.1	237.6	62.0	1.000117
27000.0	355.5	-33.1	-47.9	20.8	515.9	603.6	238.0	63.9	1.000115
27500.0	348.0	-34.3	-48.9	20.9	507.5	602.1	240.0	65.8	1.000114
28000.0	340.5	-35.5	-49.9	21.0	499.2	600.6	241.2	66.5	1.000112
28500.0	333.2	-36.7	-51.0	21.0	490.6	599.1	242.3	66.7	1.000110
29000.0	325.9	-37.9	-52.0	21.0	482.6	597.5	243.5	67.6	1.000108
29500.0	318.8	-39.1	-54.6	17.3**	474.4	596.1	244.7	68.8	1.000106
30000.0	311.8	-40.2	-59.1	10.9**	466.2	594.6	244.8	70.8	1.000104
30500.0	304.9	-41.3		4.6**	458.1	593.2	244.6	72.2	1.000102
31000.0	298.1	-42.4			450.1	591.8	244.6	71.6	1.000100
31500.0	291.4	-43.4			441.9	590.5	244.1	71.2	1.000098
32000.0	284.8	-44.4			433.8	589.2	243.4	71.2	1.000097
32500.0	278.4	-45.5			426.0	587.9	242.1	73.2	1.000095
33000.0	272.1	-46.5			418.2	586.5	240.6	76.1	1.000093
33500.0	266.0	-47.5			410.6	585.2	239.5	76.2	1.000091
34000.0	260.2	-48.5			403.2	583.9	238.6	76.3	1.000090
34500.0	254.1	-49.6			395.9	582.5	238.0	76.2	1.000088
35000.0	248.3	-50.6			388.6	581.2	236.1	76.6	1.000087
35500.0	242.5	-51.5			381.0	580.1	236.1	77.4	1.000085
36000.0	236.8	-52.3			373.6	576.9	235.3	76.2	1.000083
36500.0	231.3	-53.2			366.3	577.7	235.0	74.1	1.000082
37000.0	225.8	-54.1			359.2	576.6	234.1	70.6	1.000080
37500.0	220.5	-55.0			352.2	573.4	233.0	66.8	1.000078
38000.0	215.4	-55.9			345.4	574.2	241.5	63.5	1.000077
38500.0	210.3	-56.8			338.7	573.0	241.2	60.4	1.000075
39000.0	205.4	-57.7			332.1	571.8	241.9	59.2	1.000074
39500.0	200.6	-58.6			325.7	570.7	242.5	58.7	1.000073
40000.0	195.8	-59.9			318.3	570.3	243.1	59.9	1.000071
40500.0	191.1	-59.0			311.0	570.1	243.6	61.8	1.000069
41000.0	186.6	-59.2			303.7	569.9	243.6	62.3	1.000068
41500.0	182.1	-59.7			295.6	570.5	243.6	63.7	1.000066
42000.0	177.8	-59.2			288.1	571.1	243.6	61.3	1.000064
42500.0	173.5	-58.5			281.7	570.7	243.9	58.6	1.000063
43000.0	169.4	-58.9			273.8	570.3	243.9	55.0	1.000061

* * * AT LAST ONE ASSUMPTION FIVE HUNDRED VOLUME "AS USUAL" IN THE INTERNATIONAL JOURNAL.

STATION ALTITUDE 3989.00 FEET MSL
11 MAY 62
ASCENSION IS. 202

UPPER AIR DATA
1310020202
WIND 34005

TABLE-8 cont'd

GEOMETRIC ALTITUDE 3989.00 FEET MSL
0805 MDT

GEOMETRIC ALTITUDE 3989.00 FEET MSL

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TRUE)	WIND SPEED KNOTS	INDEX OF REFRACTION
43500.0	165.3	-59.2	269.2	509.0	269.2	269.2	53.0	1.000000
44000.0	161.4	-59.6	263.2	509.3	263.2	263.2	52.7	1.000039
44500.0	157.5	-59.9	257.4	508.9	257.4	243.1	53.0	1.000057
45000.0	153.7	-59.6	250.0	509.3	250.0	243.3	53.2	1.000050
45500.0	150.1	-58.7	243.0	570.5	243.0	243.9	57.5	1.000054
46000.0	146.4	-59.2	236.4	509.9	236.4	241.5	54.7	1.000053
46500.0	142.9	-59.6	233.2	569.3	233.2	241.0	60.7	1.000052
47000.0	139.5	-60.1	228.1	500.0	228.1	241.7	61.7	1.000051
47500.0	136.1	-60.6	223.0	500.0	223.0	242.1	62.5	1.000050
48000.0	132.8	-61.1	218.1	567.3	218.1	242.4	63.5	1.000049
48500.0	129.6	-61.5	213.4	560.7	213.4	242.7	64.7	1.000048
49000.0	126.5	-62.0	208.7	560.1	208.7	243.0	66.0	1.000046
49500.0	123.4	-62.5	204.1	565.4	204.1	243.3	66.6	1.000045
50000.0	120.4	-63.0	199.0	564.0	199.0	243.5	65.8	1.000044
50500.0	117.5	-63.4	193.2	564.2	193.2	243.4	65.6	1.000043
51000.0	114.7	-63.9	191.0	563.5	191.0	242.0	65.6	1.000043
51500.0	111.9	-63.2	185.7	564.4	185.7	241.7	65.0	1.000041
52000.0	109.2	-62.3	180.4	563.0	180.4	240.7	60.4	1.000040
52500.0	106.5	-61.4	175.3	560.9	175.3	239.7	60.1	1.000039
53000.0	104.0	-61.2	170.9	567.2	170.9	239.0	65.3	1.000038
53500.0	101.5	-61.1	160.7	567.3	160.7	238.2	64.3	1.000037
54000.0	99.0	-60.6	162.3	567.9	162.3	240.9	61.5	1.000036
54500.0	96.7	-59.4	157.0	569.5	157.0	242.9	60.8	1.000035
55000.0	94.4	-58.2	152.7	571.1	152.7	243.0	60.0	1.000034
55500.0	92.1	-57.1	140.5	572.0	140.5	240.7	53.0	1.000033
56000.0	89.9	-57.8	145.4	571.0	145.4	240.7	60.0	1.000032
56500.0	87.8	-58.4	142.4	570.7	142.4	240.9	62.7	1.000032
57000.0	85.7	-59.0	139.4	570.1	139.4	239.0	62.0	1.000031
57500.0	83.6	-59.6	136.4	569.3	136.4	240.0	60.0	1.000030
58000.0	81.5	-60.3	133.0	563.4	133.0	240.9	60.0	1.000030
58500.0	79.7	-60.2	130.3	560.0	130.3	242.7	60.0	1.000029
59000.0	77.8	-59.2	126.7	569.0	126.7	240.0	60.0	1.000029
59500.0	75.9	-59.4	123.7	569.0	123.7	240.0	60.0	1.000028
60000.0	74.1	-60.4	121.3	568.3	121.3	240.0	60.0	1.000027
60500.0	72.3	-61.4	119.0	566.9	119.0	241.0	60.0	1.000026
61000.0	70.6	-62.5	116.7	565.3	116.7	240.0	60.0	1.000026
61500.0	68.9	-62.8	114.0	563.0	114.0	240.0	60.0	1.000025
62000.0	67.2	-62.8	111.3	563.0	111.3	240.0	60.0	1.000024
62500.0	65.5	-62.8	108.0	562.0	108.0	240.0	60.0	1.000024
63000.0	64.0	-62.8	105.9	560.0	105.9	240.0	60.0	1.000024

STATION ALTITUDE 3999.00 FEET MSL
11 MAY 82 0805 MDT
ASCENSION NO. 202

UPPER AIR DATA
1310020Z
WHITE SANDS

TABLE-8 cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
100.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL.HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	"IND. DATA" DIRECTION WINDS (IN)	SPEED KNOTS	INDEX OF REFRACTION
03500.0	62.4	-60.5	102.2	565.1	173.0	9.9	1.000023	
04000.0	60.9	-58.6	90.9	570.6	167.0	8.6	1.000022	
04500.0	59.5	-58.3	90.4	571.1	169.5	7.0	1.000021	
05000.0	58.1	-57.9	94.0	571.0	173.0	5.4	1.000021	
05500.0	56.7	-57.5	91.0	572.1	170.5	3.8	1.000020	
06000.0	55.4	-57.2	89.3	572.5	176.5	2.2	1.000020	
06500.0	54.1	-56.8	87.0	573.0	210.5	1.2	1.000019	
07000.0	52.8	-56.4	84.0	573.5	210.9	.9	1.000019	
07500.0	51.5	-56.1	82.7	574.0	210.5	.5	1.000018	
08000.0	50.3	-55.7	80.0	574.5	165.0	1.5	1.000018	
08500.0	49.1	-54.8	79.4	575.0	160.2	2.6	1.000017	
09000.0	48.0	-53.8	76.2	577.0	162.1	3.6	1.000017	
09500.0	46.9	-52.7	74.1	578.4	165.0	4.0	1.000016	
70000.0	45.8	-51.8	72.1	579.6	165.5	5.3	1.000016	
70500.0	44.7	-51.7	70.4	579.6	160.0	5.3	1.000016	
71000.0	43.7	-51.5	66.7	579.9	175.0	5.3	1.000015	
71500.0	42.7	-51.4	67.1	580.1	155.5	4.4	1.000015	
72000.0	41.7	-51.3	65.5	580.5	120.4	4.4	1.000015	
72500.0	40.6	-51.2	64.0	580.4	94.5	5.5	1.000014	
73000.0	39.8	-51.1	62.5	580.0	77.5	7.2	1.000014	
73500.0	38.9	-50.9	61.0	580.7	60.5	9.3	1.000014	
74000.0	38.0	-50.8	59.0	580.9	67.9	10.4	1.000013	
74500.0	37.1	-50.7	56.2	581.1	67.0	11.4	1.000013	
75000.0	36.3	-50.6	56.0	581.2	69.1	11.8	1.000013	
75500.0	35.5	-50.5	55.5	581.4	72.0	11.4	1.000012	
76000.0	34.6	-50.5	54.2	581.5	70.4	11.1	1.000012	
76500.0	33.8	-50.2	52.9	581.7	65.4	9.0	1.000012	
77000.0	33.1	-50.5	51.7	581.5	90.5	8.7	1.000012	
77500.0	32.3	-50.9	50.0	580.8	120.9	5.0	1.000011	
78000.0	31.6	-51.2	49.0	580.4	105.7	4.8	1.000011	
78500.0	30.4	-51.6	46.5	579.9	175.9	7.0	1.000011	
79000.0	30.1	-51.9	47.4	579.4	205.0	9.7	1.000011	
79500.0	29.4	-51.7	46.5	579.8	215.0	12.4	1.000010	
80000.0	28.8	-51.5	45.2	580.2	219.1	15.2	1.000010	
80500.0	28.1	-50.9	44.1	580.7	240.0	16.9	1.000010	
81000.0	27.5	-50.6	43.0	581.2	222.2	18.7	1.000010	
81500.0	26.9	-50.2	42.0	581.7	225.0	20.0	1.000009	
82000.0	26.2	-49.8	40.9	582.2	225.0	20.1	1.000009	
82500.0	25.7	-49.4	39.9	582.7	225.1	20.3	1.000009	
83000.0	25.1	-49.0	39.0	583.2	222.0	19.8	1.000009	

STATION ALTITUDE 3989-00 FL 1 MSL
11 MAY 82 0805 MDT
ASCENDING 10. 202

UPPER AIR DATA
131002000
WHITE CLOUDS

STATION ALTITUDE 3989-00 FL 1 MSL
11 MAY 82 0805 MDT
ASCENDING 10. 202

TABLE-8 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC CM	WIND DIRECTION DEGREES TRUE	WIND SPEED KNOTS	INDEX OF REFRACTION
63500.0	24.5	-46.7	30.0	585.7	221.4	18.4	1.000008
64000.0	23.9	-46.3	37.1	584.2	219.4	16.9	1.000008
64500.0	23.4	-47.9	33.2	584.7	210.0	15.3	1.000008
65000.0	22.9	-47.5	35.3	585.2	215.3	15.6	1.000008
65500.0	22.3	-47.1	34.4	585.7	211.4	11.9	1.000008
66000.0	21.8	-46.8	33.6	586.2	207.7	10.3	1.000007
66500.0	21.3	-46.4	32.6	586.7	201.9	8.8	1.000007
67000.0	20.9	-46.0	32.0	587.2	194.0	7.2	1.000007
67500.0	20.4	-45.6	31.2	587.6	201.9	6.4	1.000007
68000.0	19.9	-45.3	30.5	588.0	203.1	10.6	1.000007
68500.0	19.5	-45.4	29.8	587.9	212.0	17.5	1.000007
69000.0	19.0	-45.5	29.1	587.7	210.0	15.0	1.000006
69500.0	18.6	-45.7	28.5	587.0	221.4	14.3	1.000006
70000.0	18.2	-45.8	27.9	587.4	210.0	15.0	1.000006
70500.0	17.8	-45.9	27.3	587.3	221.4	14.3	1.000006
71000.0	17.4	-46.0	26.7	587.2	210.0	15.0	1.000006
71500.0	17.0	-46.1	26.1	587.0	221.4	14.3	1.000006

STATION ALTITUDE 3989.00 FEET ASL
11 MAY 82 0805 MDT
ASCENSION NO. 202

MANDATORY LEVELS
1310020.00
WHITE CLOUDS

TABLE-9

GEODETIC COORDINATES
22.40043 LAT DEG
106.37033 LONG DEG

PRESSURE GEOPOTENTIAL MILLIBARS	FELT	AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUMID. PERCENT	ADDITIONAL DATA	
					DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4803.	15.8	-2.0	28.	174.2	2.4
800.0	6479.	12.3	-4.7	30.	210.7	0.1
750.0	8230.	7.7	-8.1	32.	224.7	17.3
700.0	10087.	2.8	-11.0	33.	230.0	24.0
650.0	12046.	.6	-19.1	21.	230.0	29.2
600.0	14138.	-3.6	-22.0	21.	226.4	29.7
550.0	16373.	-8.6	-26.0	22.	210.3	20.2
500.0	18772.	-14.1	-31.1	22.	227.1	41.0
450.0	21371.	-19.2	-37.2	10.	232.0	47.2
400.0	24205.	-26.5	-42.0	20.	233.4	51.6
350.0	27322.	-34.0	-46.7	21.	239.7	55.3
300.0	30804.	-42.1			244.7	71.8
250.0	34780.	-50.3			230.1	70.3
200.0	39469.	-58.7			242.0	58.6
175.0	42220.	-58.4			243.0	59.7
150.0	45308.	-50.7			241.9	57.7
125.0	49114.	-62.2			243.1	67.2
100.0	53632.	-61.1			240.1	62.8
80.0	58225.	-60.3			202.0	8.9
70.0	60954.	-62.8			221.0	17.7
60.0	64697.	-50.4			100.3	7.7
50.0	67874.	-55.5			103.0	1.7
40.0	72609.	-51.1			01.0	0.7
30.0	78756.	-52.0			209.4	10.0
25.0	82657.	-49.0			222.0	17.0
20.0	87503.	-45.3			200.7	10.1

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4120.50 FEET MSL
11 MAY 62 0715 MDT
ASCENSION I.S. 137

STATION ICANT LEVEL 101A
1510010107
HOLLOWAY

STATION CODE 01010107
STATION LAT 0106
STATION LONG 1007 14 6

TABLE-10

PRESSURE PILLSBARS	GEOMETRIC ALTITUDE MFL FEET	TEMPERATURE AIR DEWPOINT DIFFERENCE CENTIGRADE	RELATIVE HUMIDITY
676.6	4126.6	8.7	79.0
565.7	4281.6	14.9	71.0
455.7	4605.4	17.1	60.0
350.0	4792.4	16.8	60.0
769.1	7557.6	10.4	52.0
700.0	10098.4	2.3	54.0
667.2	11369.4	.1	52.0
547.4	12161.6	-.5	45.0
563.0	15788.6	-6.8	34.0
518.2	17096.1	-12.0	37.0
500.0	18793.7	-13.3	30.0
469.9	20337.9	-16.8	26.0
455.2	21121.5	-17.8	24.0
400.0	24254.2	-25.6	20.0
336.7	28279.7	-35.9	17.0
314.6	29821.2	-39.4	16.0
300.0	30867.5	-41.6	
270.5	33175.7	-46.2	
250.0	34685.6	-48.2	
200.0	39600.4	-59.5	
173.3	42536.0	-62.6	
158.1	44403.9	-61.7	
150.0	45476.6	-62.4	
138.7	47073.4	-61.5	
112.1	51427.6	-61.4	
104.6	52770.4	-60.1	
100.0	53773.2	-60.8	
92.6	55128.7	-61.4	
85.8	56018.3	-59.3	
70.0	61098.6	-62.0	
66.9	62020.7	-63.4	
60.0	64251.3	-59.2	
50.0	68068.6	-54.3	
45.0	70300.6	-54.2	
41.8	71874.9	-51.2	
35.0	75608.8	-51.4	
32.8	77090.2	-49.1	
30.0	79012.5	-52.4	
28.0	80485.0	-53.3	
20.0	87751.7	-45.5	

GEODOLIC COORDINATES
 32.88805 LAT DEG
 106.09965 LONG DEG

SIGHT, PLANT LEVEL DATA
 1310010137
 HOLLONMAY
 TABLE-10 cont'd

STATION ALTITUDE 4120.59 FEET MSL
 11 MAY 62 0715 MDT
 ASCENSION NO. 137

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR D'WPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
18.4	89625.1		-44.6

STATION ALTITUDE 4126.54 FEET MSL
11 MAY 62 0715 MDT
ASCENSION NO. 137

UT PLR AIR DATA
1510010137
HOLLOWAY

TABLE-11 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	RELATIVE HUMIDITY PERCENT	WIND DIRECTION DEGREES	WIND SPEED MILES PER HOUR	WIND GUSTS MILES PER HOUR	WIND DIRECTION		INDEX OF REFRACTION
							RELATIVE HUMIDITY PERCENT	WIND SPEED MILES PER HOUR	
24000.0	404.2	-25.0	25.8	-38.9	567.3	613.0	230.0	52.5	1.000124
24500.0	395.8	-26.2	26.1	-30.9	558.3	612.2	230.0	53.2	1.000120
25000.0	387.4	-27.5	26.2	-41.0	549.4	610.6	230.0	53.3	1.000123
25500.0	379.2	-28.8	26.3	-42.1	540.0	609.0	230.0	53.9	1.000121
26000.0	371.2	-30.1	26.4	-43.1	531.9	607.4	230.0	56.1	1.000119
26500.0	363.3	-31.3	26.6	-44.2	523.4	605.8	230.0	58.2	1.000117
27000.0	355.7	-32.6	26.7	-45.3	515.1	604.2	230.0	59.6	1.000115
27500.0	348.1	-33.9	26.8	-46.4	506.9	602.6	230.0	60.9	1.000114
28000.0	340.8	-35.2	26.9	-47.5	498.0	601.0	230.0	62.3	1.000112
28500.0	333.4	-36.4	27.1	-48.6	490.0	599.5	230.0	63.7	1.000110
29000.0	326.2	-37.5	27.3	-49.7	482.2	598.0	230.0	64.4	1.000108
29500.0	319.1	-38.7	27.8	-50.8	474.0	596.5	230.0	65.0	1.000106
30000.0	312.1	-39.8	23.3	-52.7	465.8	595.2	230.0	64.2	1.000104
30500.0	305.2	-40.8	10.2	-60.2	457.0	593.8	230.0	63.3	1.000102
31000.0	298.5	-41.8			449.5	592.5	230.0	62.6	1.000100
31500.0	291.8	-42.8			441.4	591.2	230.0	62.0	1.000098
32000.0	285.3	-43.8			433.4	589.9	230.0	62.4	1.000097
32500.0	278.9	-44.8			425.0	588.6	230.0	63.0	1.000095
33000.0	272.7	-45.8			417.9	587.4	230.0	63.7	1.000093
33500.0	266.5	-46.8			410.1	586.2	230.0	67.1	1.000091
34000.0	260.4	-47.8			402.3	585.0	230.0	66.4	1.000090
34500.0	254.5	-48.5			394.7	583.9	230.0	65.5	1.000088
35000.0	248.7	-49.4			387.3	582.7	230.0	63.6	1.000086
35500.0	242.9	-50.5			380.1	581.5	230.0	61.5	1.000085
36000.0	237.2	-51.0			373.0	579.8	230.0	59.5	1.000083
36500.0	231.6	-52.7			366.1	578.4	230.0	58.6	1.000082
37000.0	226.2	-53.8			359.3	577.0	230.0	59.7	1.000080
37500.0	220.9	-54.9			352.0	575.5	230.0	60.7	1.000079
38000.0	215.8	-56.0			345.1	574.1	230.0	62.1	1.000077
38500.0	210.7	-57.1			338.7	572.6	230.0	63.5	1.000076
39000.0	205.8	-58.2			333.5	571.2	230.0	64.5	1.000074
39500.0	201.0	-59.3			327.3	569.7	230.0	65.4	1.000073
40000.0	196.1	-60.4			320.4	568.4	230.0	66.0	1.000071
40500.0	191.4	-61.5			313.5	567.0	230.0	66.5	1.000070
41000.0	186.8	-62.6			306.7	565.5	230.0	66.6	1.000068
41500.0	182.3	-63.7			300.0	564.0	230.0	66.1	1.000067
42000.0	177.9	-64.8			293.5	562.5	230.0	65.6	1.000065
42500.0	173.0	-65.9			287.2	561.0	230.0	63.4	1.000064
43000.0	168.4	-67.0			281.0	559.5	230.0	60.9	1.000062
43500.0	163.3	-68.1			275.0	558.0	230.0	58.5	1.000061

** AT LEAST ONE ADDITIONAL RELATIVE HUMIDITY VALUE AS GIVEN IN THE ATTEMPTATION.

STATION ALTITUDE 4126.59 Feet MSL
11 MAY 82 0715 MDT
ASCENSION NO. 137

UPPER AIR WIND
1310010107
COLLECTION

STATION COORDINATES
N 000005 LAT DEG
100.0000 LONG DEG

TABLE-11 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	WIND METER	WIND KNOTS	WIND DIRECTION CORRECTION	WIND SPEED KNOTS	WIND DIRECTION CORRECTION	WIND SPEED KNOTS	WIND DIRECTION CORRECTION
44000.0	161.3	-61.9		263.9	500.2		299.2	500.2		500.2	1.000059
44500.0	157.4	-61.8		259.3	500.4		295.1	500.4		500.4	1.000058
45000.0	153.5	-62.1		255.4	500.0		291.0	500.0		500.0	1.000056
45500.0	149.6	-62.4		247.0	500.0		287.0	500.0		500.0	1.000055
46000.0	146.2	-62.1		241.3	500.0		283.0	500.0		500.0	1.000054
46500.0	142.7	-61.8		235.2	500.3		278.5	500.3		500.3	1.000052
47000.0	139.2	-61.5		229.2	500.7		274.5	500.7		500.7	1.000051
47500.0	135.8	-61.5		223.0	500.8		270.7	500.8		500.8	1.000050
48000.0	132.6	-61.5		216.2	500.0		267.2	500.0		500.0	1.000049
48500.0	129.4	-61.5		212.9	500.0		263.2	500.0		500.0	1.000047
49000.0	126.2	-61.5		207.7	500.0		259.0	500.0		500.0	1.000046
49500.0	123.2	-61.4		202.7	500.0		254.2	500.0		500.0	1.000045
50000.0	120.2	-61.4		197.0	500.9		249.2	500.9		500.9	1.000044
50500.0	117.3	-61.4		193.0	500.9		245.2	500.9		500.9	1.000043
51000.0	114.5	-61.4		188.3	500.9		240.0	500.9		500.9	1.000042
51500.0	111.7	-61.3		183.7	507.0		235.0	507.0		507.0	1.000041
52000.0	109.0	-60.8		178.4	507.0		230.1	507.0		507.0	1.000040
52500.0	106.4	-60.4		174.2	500.3		227.0	500.3		500.3	1.000039
53000.0	103.8	-60.3		169.9	500.4		223.0	500.4		500.4	1.000038
53500.0	101.3	-60.6		165.1	500.0		219.0	500.0		500.0	1.000037
54000.0	98.9	-60.9		162.3	507.0		215.1	507.0		507.0	1.000036
54500.0	96.5	-61.1		159.0	507.0		211.0	507.0		507.0	1.000035
55000.0	94.2	-61.3		154.9	507.0		207.0	507.0		507.0	1.000034
55500.0	91.9	-61.0		150.9	507.0		203.0	507.0		507.0	1.000034
56000.0	89.7	-60.4		146.9	508.2		199.0	508.2		508.2	1.000033
56500.0	87.6	-59.9		143.0	508.9		195.0	508.9		508.9	1.000032
57000.0	85.5	-59.5		139.3	509.9		191.0	509.9		509.9	1.000031
57500.0	83.4	-59.8		135.2	509.1		187.0	509.1		509.1	1.000030
58000.0	81.4	-60.1		131.1	509.7		183.0	509.7		509.7	1.000029
58500.0	79.4	-60.4		127.1	508.3		179.0	508.3		508.3	1.000028
59000.0	77.5	-60.7		124.3	507.0		175.0	507.0		507.0	1.000028
59500.0	75.7	-61.0		121.4	507.0		171.0	507.0		507.0	1.000027
60000.0	73.8	-61.3		116.7	506.1		167.0	506.1		506.1	1.000026
60500.0	72.1	-61.6		115.0	505.2		163.0	505.2		505.2	1.000026
61000.0	70.3	-61.9		113.0	505.3		159.0	505.3		505.3	1.000025
61500.0	68.6	-62.6		111.2	504.4		155.0	504.4		504.4	1.000025
62000.0	67.0	-63.4		109.1	503.9		151.0	503.9		503.9	1.000024
62500.0	65.4	-62.5		105.0	503.7		147.0	503.7		503.7	1.000023
63000.0	63.8	-61.0		102.9	503.0		143.0	503.0		503.0	1.000023
63500.0	62.2	-60.0		102.9	503.0		143.0	503.0		503.0	1.000023

UPPER AIR DATA
1310010137
HOLLOMAN
CLOUDS COORDINATES
32.00865 LAT DEG
100.09965 LONG DEG

TABLE-11 cont'd

STATION ALTITUDE 4126.50 FEET MSL
11 MAY 82 0715 MDT
ASCENSION NO. 137

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KILOMETERS PER SECOND	WIND DIRECTION (IN) DEGREES	WIND SPEED KNOTS	INDEX OF REFRACTION
64000.0	60.7	-59.7	99.4	99.4	509.2	207.9	10.7	1.0000022
64500.0	59.3	-58.9	90.4	90.4	570.3	205.0	9.5	1.0000021
65000.0	57.9	-58.2	93.0	93.0	571.1	205.0	8.2	1.0000021
65500.0	50.5	-57.6	91.4	91.4	572.0	209.0	6.7	1.0000020
66000.0	55.2	-57.0	80.9	80.9	572.0	215.1	5.3	1.0000020
66500.0	53.9	-56.3	80.0	80.0	573.7	210.0	4.1	1.0000019
67000.0	52.6	-55.7	84.3	84.3	574.5	214.0	2.9	1.0000019
67500.0	51.4	-55.0	82.1	82.1	575.4	200.2	1.9	1.0000018
68000.0	50.2	-54.4	79.9	79.9	576.2	103.0	1.9	1.0000018
68500.0	49.0	-54.3	76.0	76.0	576.4	135.1	2.7	1.0000017
69000.0	47.8	-54.3	70.2	70.2	576.4	132.0	3.3	1.0000017
69500.0	40.7	-54.2	74.4	74.4	576.4	141.3	3.6	1.0000017
70000.0	45.6	-54.2	72.0	72.0	576.4	149.0	4.0	1.0000010
70500.0	44.6	-53.8	70.0	70.0	577.0	154.7	4.3	1.0000010
71000.0	43.5	-52.9	60.9	60.9	578.2	159.7	4.5	1.0000015
71500.0	42.5	-51.9	67.0	67.0	579.5	104.1	4.8	1.0000015
72000.0	41.6	-51.2	65.2	65.2	580.4	102.4	4.9	1.0000015
72500.0	40.6	-51.2	63.7	63.7	580.4	130.4	5.1	1.0000014
73000.0	39.7	-51.3	62.3	62.3	580.5	120.5	5.7	1.0000014
73500.0	30.8	-51.3	60.9	60.9	580.5	122.9	6.1	1.0000014
74000.0	37.9	-51.3	59.3	59.3	580.2	121.4	6.4	1.0000013
74500.0	37.0	-51.3	58.1	58.1	580.2	120.0	6.7	1.0000013
75000.0	36.1	-51.4	50.0	50.0	580.2	112.0	7.3	1.0000013
75500.0	35.3	-51.4	55.5	55.5	580.1	104.0	8.2	1.0000012
76000.0	34.5	-50.9	54.1	54.1	580.0	90.2	9.2	1.0000012
76500.0	33.7	-50.1	52.0	52.0	581.9	101.4	9.0	1.0000012
77000.0	32.9	-49.2	51.2	51.2	582.9	111.3	8.2	1.0000011
77500.0	32.2	-49.8	50.2	50.2	582.2	120.0	7.7	1.0000011
78000.0	31.4	-50.7	49.2	49.2	581.1	140.0	7.1	1.0000011
78500.0	30.7	-51.5	43.3	43.3	580.0	102.7	7.1	1.0000011
79000.0	30.0	-52.4	47.4	47.4	576.9	102.4	8.1	1.0000011
79500.0	29.3	-52.7	40.3	40.3	578.4	190.2	0.9	1.0000010
80000.0	28.6	-53.0	45.3	45.3	578.0	105.7	8.7	1.0000010
80500.0	28.0	-53.3	44.3	44.3	577.7	107.1	8.5	1.0000010
81000.0	27.3	-52.7	43.2	43.2	570.4	170.7	0.0	1.0000010
81500.0	26.7	-52.2	42.1	42.1	579.1	205.2	7.1	1.0000009
82000.0	20.1	-51.7	41.1	41.1	579.8	225.2	0.8	1.0000009
82500.0	25.5	-51.1	40.0	40.0	580.5	234.9	7.4	1.0000009
83000.0	24.9	-50.6	39.0	39.0	581.2	234.0	9.4	1.0000009
83500.0	24.4	-50.1	30.1	30.1	581.9	234.7	10.3	1.0000008

STATION ALTITUDE 4126.59 FEET MSL
11 MAY 62 0715 MDT
ASCENSION I.O. 137

U, PLR AIR DATA
1310010157
FOLLOWING

TABLE-11 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE FIR DEGREES CELSIUS	RELAT HUM. PERCENT	DENSITY GM/CM ³	WATER METER	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	WIND GUSTS KNOTS	WIND MAX OR REFLECTION
04000.0	25.8	-49.5		37.1	582.0	200.1	11.4		1.000000
04500.0	25.5	-49.0		36.2	583.3	221.0	10.4		1.000000
05000.0	24.7	-48.5		35.3	583.9	233.5	10.0		1.000000
05500.0	22.2	-47.9		34.4	594.0	173.0	6.0		1.000007
06000.0	21.7	-47.4		33.5	595.3	200.9	7.9		1.000007
06500.0	21.2	-46.9		32.7	596.0	207.1	7.1		1.000007
07000.0	20.7	-46.3		31.6	596.7	210.2			1.000007
07500.0	20.5	-45.8		31.0	587.4				1.000007
08000.0	19.8	-45.4		30.3	567.9				1.000007
08500.0	19.4	-45.2		29.6	568.2				1.000006
09000.0	18.6	-45.0		28.9	568.4				1.000006
09500.0	18.5	-44.8		28.2	568.9				1.000006

STATION ALTITUDE 1126.59 FEET MSL
11 MAY 62 0715 MDT
ASCENSION NO. 157

NAVIGATORY LEVELS
131001013,
HOLLOMAN
TABLE-12

GEODETIC COORDINATES
32.00865 LAT DEG
106.09965 LONG DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4789.	16.8	30.	131.0	2.7
800.0	6471.	12.9	31.	194.3	3.6
750.0	6236.	8.5	33.	230.4	11.8
700.0	10039.	3.3	34.	234.6	21.7
650.0	12044.	-4	24.	234.9	29.1
600.0	14130.	-3.4	28.	216.0	20.3
550.0	16366.	-6.3	33.	211.3	33.0
500.0	18768.	-13.3	30.	224.7	44.9
450.0	21372.	-18.5	24.	230.2	49.1
400.0	24215.	-25.6	20.	230.4	53.0
350.0	27341.	-33.6	27.	237.3	60.6
300.0	30828.	-41.6		242.0	62.8
250.0	34815.	-49.2		233.4	64.4
200.0	39507.	-59.5		237.0	65.6
175.0	42230.	-62.4		241.3	64.3
150.0	45356.	-62.4		244.0	66.5
125.0	49061.	-61.5		230.3	65.7
100.0	53610.	-60.8		239.0	55.
80.0	58172.	-60.3		233.3	
70.0	60892.	-62.0		239.3	24.9
60.0	64025.	-59.2		207.1	10.2
50.0	67816.	-54.3		101.0	1.9
40.0	72534.	-51.2		131.3	3.4
30.0	78678.	-52.4		101.0	0.1
25.0	82947.	-50.7		234.3	0.5
20.0	87574.	-45.5			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

Lance

STATION ALTITUDE 4051.00 FEET MSL
11 MAY 82 0805 MDT
ASCENSION NO. 40

SIGNIFICANT LEVEL DATA
1310030040
JALLER

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE-13

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
874.0	16.2	-3.3	20.0
850.0	14.8	-3.0	29.0
775.2	9.3	-5.0	36.0
733.7	4.8	-6.4	44.0
700.0	1.3	-11.4	38.0
677.9	-4	-20.0	21.0
669.7	0	-23.5	15.0
628.8	-2.1	-1.9	24.0
585.7	-5.0	-26.9	16.0
500.0	-14.5	-33.5	18.0
400.0	-26.6	-42.7	20.0
333.3	-37.9		
300.0	-43.3		
250.0	-51.0		
233.6	-53.5		
217.2	-56.5		
200.0	-58.0		
186.6	-57.8		
167.8	-59.9		
158.8	-58.7		
150.0	-60.3		
133.6	-62.7		
125.6	-62.5		
122.5	-63.4		
110.3	-61.7		
103.1	-58.5		
100.0	-58.7		
92.9	-58.3		
89.5	-58.5		

STATION ALTITUDE 4051.00 FEET MSL
11 MAY 82 0805 MDT
ASCENSION NO. 40

UPPER AIR DATA
1310030040
JALLEN
TABLE-14

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
4051.0	874.0	16.2	26.0	1050.1	663.4	0	0	1.000256
4500.0	860.0	15.4	27.7	1036.1	662.5	200.5	2.8	1.000253
5000.0	844.6	14.4	29.5	1021.0	661.4	200.5	6.0	1.000250
5500.0	829.4	13.3	30.9	1006.4	660.1	200.5	9.2	1.000246
6000.0	814.5	12.2	32.2	992.0	658.8	207.9	12.0	1.000242
6500.0	799.8	11.2	33.6	977.9	657.6	214.8	13.7	1.000239
7000.0	785.4	10.1	35.0	964.0	656.3	219.9	15.5	1.000235
7500.0	771.1	8.9	36.8	950.0	655.0	223.4	17.3	1.000232
8000.0	757.0	7.4	39.5	938.2	653.1	220.1	19.1	1.000229
8500.0	743.1	5.8	42.1	926.1	651.4	226.0	21.3	1.000225
9000.0	729.4	4.4	43.3	913.9	649.6	227.4	23.6	1.000221
9500.0	715.9	3.0	40.9	901.7	647.9	229.0	26.4	1.000218
10000.0	702.5	1.6	38.5	889.6	646.2	231.0	29.3	1.000211
10500.0	689.4	5	29.9	876.7	644.8	232.4	32.2	1.000205
11000.0	676.4	-3	19.9	863.1	643.7	232.0	34.8	1.000198
11500.0	663.6	-3	16.3	846.9	643.7	230.5	34.3	1.000194
12000.0	651.1	-9	19.0	832.7	643.0	227.7	33.2	1.000191
12500.0	638.7	-1.6	21.7	818.8	642.2	224.1	32.6	1.000188
13000.0	626.7	-2.2	23.6	805.3	641.5	220.0	31.9	1.000186
13500.0	614.8	-3.0	21.5	792.3	640.5	215.0	30.0	1.000182
14000.0	603.0	-3.8	19.3	779.5	639.5	214.0	29.2	1.000178
14500.0	591.5	-4.6	17.1	767.0	638.6	214.5	28.7	1.000175
15000.0	580.1	-5.6	16.1	755.0	637.4	213.5	28.4	1.000172
15500.0	568.8	-6.8	16.4	743.5	636.0	213.4	28.7	1.000169
16000.0	557.7	-7.9	16.6	732.3	634.6	213.4	29.3	1.000166
16500.0	546.8	-9.1	16.9	721.2	633.1	210.1	31.1	1.000163
17000.0	536.1	-10.3	17.1	710.4	631.7	210.0	33.3	1.000161
17500.0	525.7	-11.5	17.4	699.7	630.3	218.1	35.5	1.000158
18000.0	515.4	-12.7	17.6	689.1	628.8	219.7	37.6	1.000156
18500.0	505.4	-13.9	17.9	678.6	627.4	221.3	40.1	1.000153
19000.0	495.3	-15.0	18.1	668.3	626.0	223.0	43.4	1.000151
19500.0	485.2	-16.1	18.3	657.5	624.6	224.5	46.5	1.000148
20000.0	475.4	-17.2	18.5	647.0	623.3	225.0	48.6	1.000146
20500.0	465.7	-18.4	18.6	636.0	621.9	227.2	46.8	1.000143
21000.0	456.2	-19.5	18.8	626.4	620.6	228.3	45.3	1.000141
21500.0	447.0	-20.6	19.0	616.4	619.2	229.4	44.6	1.000139
22000.0	437.9	-21.7	19.2	606.5	617.8	229.7	47.0	1.000136
22500.0	429.0	-22.8	19.4	596.8	616.5	230.2	49.2	1.000134
23000.0	420.3	-23.9	19.6	587.3	615.1	230.9	51.1	1.000132
23500.0	411.7	-25.0	19.7	578.0	613.7	231.0	52.8	1.000130

STATION ALTITUDE 4051.00 FEET MSL
11 MAY 82 0805 HDT
ASCENSION NO. 40

UPPER AIR DATA
1310030000
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE-14 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBI METER	SPEED KNOTS	WIND DATA DIRECTION (IN) DEGREES (IN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	400.3	-26.1	19.9	568.8	612.3	232.5	54.5	1.000128
24500.0	394.9	-27.4	18.6**	559.7	610.8	233.0	56.3	1.000125
25000.0	380.5	-28.7	16.2**	550.0	609.1	233.3	58.1	1.000123
25500.0	370.3	-30.1	13.9**	542.0	607.4	233.6	59.2	1.000121
26000.0	370.2	-31.4	11.5**	533.4	605.7	234.3	59.9	1.000119
26500.0	362.3	-32.7	9.2**	525.0	604.1	234.7	61.0	1.000117
27000.0	354.6	-34.1	6.8**	516.7	602.4	235.5	62.5	1.000115
27500.0	347.0	-35.4	4.4**	508.5	600.7	236.1	64.0	1.000113
28000.0	339.7	-36.7	2.1**	500.5	599.0	236.7	65.6	1.000112
28500.0	332.4	-38.0		492.5	597.4	237.4	66.9	1.000110
29000.0	325.1	-39.2		484.0	595.9	238.1	67.1	1.000108
29500.0	317.9	-40.3		475.0	594.4	238.7	67.3	1.000106
30000.0	310.9	-41.5		467.5	593.0	238.7	68.1	1.000104
30500.0	304.0	-42.6		459.4	591.5	238.7	68.8	1.000102
31000.0	297.2	-43.7		451.3	590.1	238.5	69.3	1.000101
31500.0	290.5	-44.7		442.9	588.9	238.4	69.5	1.000099
32000.0	283.9	-45.6		434.7	587.6	238.4	69.4	1.000097
32500.0	277.5	-46.6		426.7	586.4	238.3	69.8	1.000095
33000.0	271.2	-47.6		418.8	585.1	238.1	69.4	1.000093
33500.0	265.0	-48.5		411.0	583.9	237.3	69.5	1.000092
34000.0	259.0	-49.5		403.5	582.6	237.5	69.0	1.000090
34500.0	253.1	-50.5		396.0	581.3	237.6	67.1	1.000088
35000.0	247.3	-51.4		388.6	580.1	237.7	68.2	1.000087
35500.0	241.6	-52.3		381.0	579.0	237.7	68.7	1.000085
36000.0	236.0	-53.1		373.7	577.4	238.0	69.2	1.000083
36500.0	230.5	-54.1		366.5	576.7	238.1	69.7	1.000082
37000.0	225.1	-55.0		359.5	575.4	238.1	70.2	1.000080
37500.0	219.8	-56.0		352.6	574.1	238.1	70.2	1.000079
38000.0	214.6	-56.7		345.4	573.1	238.1	70.1	1.000077
38500.0	209.5	-57.2		337.9	572.0	238.1	70.2	1.000075
39000.0	204.6	-57.6		330.6	572.0	238.0	70.4	1.000074
39500.0	199.7	-58.0		323.3	571.4	238.1	70.5	1.000072
40000.0	195.0	-57.9		315.6	571.5	238.0	70.5	1.000070
40500.0	190.3	-57.9		308.0	571.6	238.0	70.1	1.000069
41000.0	185.8	-57.9		300.7	571.6	238.0	69.6	1.000067
41500.0	181.4	-58.4		294.1	571.0	237.6	69.7	1.000066
42000.0	177.0	-58.8		287.6	570.3	238.0	69.4	1.000064
42500.0	172.8	-59.3		281.5	569.7	238.5	62.9	1.000063
43000.0	168.7	-59.8		275.4	569.0	238.6	61.0	1.000061
43500.0	164.6	-59.5		268.4	569.5	238.6	59.9	1.000060

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED FOR EACH ALTITUDE.

STATION ALTITUDE 4051.00 FEET MS
11 MAY 82 0805 MDT
ASCENSION NO. 40

UPPER AIR DATA
131003 0400
JALLEN

TABLE-14 cont'd

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

GEOMETRIC ALTITUDE MSL FELT	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) DEGREES	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	160.7	-59.0			261.4	570.2	231.3	59.1	1.000058
44500.0	150.8	-59.0			255.2	570.0	230.0	58.3	1.000057
45000.0	153.1	-59.7			249.9	569.1	231.3	57.6	1.000056
45500.0	149.4	-60.4			244.6	568.3	232.1	56.9	1.000054
46000.0	145.8	-60.9			239.3	567.6	232.9	56.4	1.000053
46500.0	142.3	-61.4			234.1	566.9	233.7	55.8	1.000052
47000.0	138.8	-61.9			229.0	566.2	234.4	55.3	1.000051
47500.0	135.5	-62.4			224.0	565.5	234.6	55.0	1.000050
48000.0	132.2	-62.7			218.6	565.2	234.6	54.6	1.000049
48500.0	129.0	-62.6			213.4	565.3	235.3	54.6	1.000048
49000.0	125.9	-62.5			208.2	565.4	235.6	54.7	1.000046
49500.0	122.8	-63.5			204.0	564.1	236.6	54.8	1.000045
50000.0	119.8	-63.2			198.8	564.5	237.4	55.0	1.000044
50500.0	116.9	-62.8			193.6	565.1	238.2	55.2	1.000043
51000.0	114.1	-62.3			188.5	565.7	239.0	55.7	1.000042
51500.0	111.3	-61.9			183.5	566.3	239.7	56.2	1.000041
52000.0	108.6	-61.0			178.3	567.5	240.4	57.0	1.000040
52500.0	106.0	-59.8			173.1	569.0	241.2	57.8	1.000039
53000.0	103.5	-58.7			168.1	570.5	241.9	59.2	1.000037
53500.0	101.0	-58.6			164.0	570.6	242.6	60.6	1.000037
54000.0	98.6	-58.6			160.1	570.6			1.000036
54500.0	96.2	-58.5			156.2	570.8			1.000035
55000.0	94.0	-58.4			152.4	571.0			1.000034
55500.0	91.7	-58.4			148.8	570.9			1.000033
56000.0	89.5	-58.5			145.3	570.6			1.000032

STATION ALTITUDE 4051.00 FEET MSL
11 MAY 82
ASCENSION NO. 40 0805 MDT

MANDATORY LEVELS
1310030040
JALLEN

GEOGRAPHIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE-15

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT		DIRECTION (DEGREES(TN))	SPEED KNOTS
850.0	4822.	14.8	-3.0	29.	206.5	4.9
800.0	6493.	11.2	-4.2	34.	214.7	13.7
750.0	8247.	6.6	-5.8	41.	226.5	20.2
700.0	10087.	1.3	-11.4	38.	231.9	29.8
650.0	12034.	-1.0	-21.5	19.	227.5	33.1
600.0	14117.	-4.0	-24.3	19.	214.4	29.0
550.0	16350.	-8.8	-29.5	17.	215.9	30.5
500.0	18746.	-14.5	-33.5	18.	222.2	41.8
450.0	21337.	-20.2	-37.8	19.	229.2	44.3
400.0	24164.	-26.6	-42.7	20.	232.8	55.1
350.0	27275.	-34.9	-60.4	5.**	235.8	63.4
300.0	30740.	-43.3			238.8	69.1
250.0	34699.	-51.0			237.7	67.7
200.0	39377.	-58.0			238.0	70.5
175.0	42136.	-59.1			236.2	63.9
150.0	45302.	-60.3			231.9	57.1
125.0	49004.	-62.7			238.0	54.7
100.0	53545.	-58.7				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.